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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,455	12/26/2001	Takayoshi Oyamada	0649-0814P	2939
2292	7590	07/26/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			CHEA, THORL	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	

1752
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DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/025,455

**Applicant(s)**

OYAMADA ET AL.

**Examiner**

Thorl Chea

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06/27/06.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 6-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 6-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1. This office action is responsive to the communication on June 27, 2006; claims 1, 6-11 are pending; claims 2-5, 12-13 have been canceled.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 27, 2006 has been entered.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6-11 are rejected under 35 U.S.C. 103(a) as obvious over the combination of EP1004930 (EP'930), Matsumoto et al (US Patent No. 5,958,668) and Hayashi et al (US Patent No. 4,273,723). The EP'930 discloses a photothermographic material containing non-photosensitive organic silver salt grain similar to that of the claimed invention. The grain having aspect ratio (AR) of at least 3; the average of the average grain diameter of 0.01 to 0.8  $\mu\text{m}$ ; the average of the needle ratio of said grain measure from the principal plane direction (Needle ratio  $\div (\text{MxLNG})/(\text{WIDTH})$  is not less than 1.1 and less than 10 (page 3, and page 4). On page 5, paragraph [0052 to 0053], the silver behenate, silver arachidate, and/or silver strearate are preferred organic silver salt. Matsumoto in column 17 lines 10-15 discloses "silver behenate is

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the most preferred in terms of whiteness and light stability. Silver behenate also has excellent moisture resistance, and can be used in combination with a reducing agent having a relatively weak reducing ability". Hayashi et al in column 6, Example 1 the purity of silver behenate product as extremely high as 98.1 %.

It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to would have selected silver benehenate having grains structure within the scope taught in EP'930 to provide the non-photosensitive organic silver salt grains claimed in the present claimed invention. The worker of ordinary skill in the art would have selected the silver behenate of because of its excellent moisture resistance and the its having a relatively weak reducing ability recognized in Matsumoto with the high purity known in Hayashi et al and the non-photosensitive organic silver salt having grains structure taught in EP'930 provides photothermographic material with high sensitivity, reduced image defects as well as low fog.

The limitation of claims 6-8 are related to the claiming of a material by a process. "(E)ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of prior art, the claim is unpatentable even though the prior art product was made by different process." In re Thorpe 777 F.2d 695, 698, 227 USPQ 694, 966 (Fed. Cir. 1985).

5. Claims 1, 6-11 are rejected under 35 U.S.C. 103(a) as obvious over the combination of EP0962812 (EP'812), Matsumoto et al (US Patent No. 5,958,668), and Hayashi et al (US Patent No. 4,273,723).

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EP'812 discloses a heat-developable material containing having fatty acid silver salt particle having the average equivalent-sphere diameter from 0.1 to 0.8  $\mu\text{m}$ ; the average ratio of long sides/short sides in main planes of 1 to 4; the aspect ratio of 2 to 30. The preferred aliphatic carboxylic acids include cerotic acid, lignoceric acid, behenic acid, erucic acid, arachidic acid, stearic acid, ...camphoric acid and mixture thereof. See page 5, paragraph [0035]. The preparation of silver behenate is shown on page 25-26, especially Table 2. The material having one or more layer is shown on page 21, paragraph [0187]. Matsumoto in column 17 lines 10-15 discloses that "silver behenate is the most preferred in terms of whiteness and light stability. Silver behenate also has excellent moisture resistance, and can be used in combination with a reducing agent having a relatively weak reducing ability". Hayashi et al in column 6, Example 1-2 discloses the purity of silver behenate product as extremely high as 98.1 %.

It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to would have selected silver behenate having grains structure within the scope taught in EP'812 to provide the non-photosensitive organic silver salt grains claimed in the present claimed invention. The worker of ordinary skill in the art would have selected the silver behenate having high purity taught in Hayashi et al because of its excellent moisture resistance and the its having a relatively weak reducing ability recognized in Matsumoto and the non-photosensitive organic silver salt having grains structure taught in EP'812 provides photothermographic material with high sensitivity, reduced image defects as well as low fog.

The limitation of claims 6-8 is related to the claiming of a material by a process. "(E)ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its

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method of production. If the product in the product-by-process claim is the same or obvious from a product of prior art, the claim is unpatentable even though the prior art product was made by different process.” In re Thorpe 777 F.2d 695, 698, 227 USPQ 694, 966 (Fed. Cir. 1985).

***Response to Arguments***

6. Applicant's arguments filed February 9, 2006 have been fully considered but they are not persuasive because of the reason set forth in the rejection above, the reason forth in the Final Office Action on August 9, 2005, and the advisory action on March 1, 2006. It is the Examiner's position that the invention as claimed is prime facie obvious over the combination of the applied prior art of record. It has been found in EP'930 that the silver salt of an organic acid having dimension therein provide thermally heat developable material with high sensitivity as well as low fog, and the silver salt of an organic preferred therein the silver behenate, silver arachidate, and/or silver stearate. Moreover, it has been known that the silver behenate provides thermally heat developable material with superior property such as excellent moisture resistance, and can be used in combination with a reducing agent having a relatively weak reducing ability such as taught in Matsumoto et al. Therefore, the worker of ordinary skill in the art would have selected silver salt of an organic having high silver behenate in combination with the dimension taught in EP'930 or EP'812 with an expectation of achieving a thermally developable material with superior results.

The argument with respect to the ability to produce silver salt of an organic acid having high silver behenate is not persuasive since at the time the invention was made Hayashi et al could be able to produce the silver behenate having high purity of silver behenate, i.e. silver behenate content in silver salt of an organic acid up to 98.1 %. Moreover, the scope of the claimed

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invention is related to the content of silver arachidate that is 3 mole % or less of the non-photosensitive silver salt which encompasses the scope of 0% of silver arachidate, and the scope of the content of silver behenate that is 97 to 100 mole % of the non-photosensitive organic silver salt encompasses the scope of the non-photosensitive organic silver salt other than the silver arachidate.

The Examiner's position with respect to unexpected results remains unchanged for same reason set forth in the previous action. Moreover, the results would have expected by the worker of ordinary skill in the art due to the content of the silver behenate. Furthermore, the results are not commensurate with the dimension of non-photosensitive organic silver salt grains claimed in the present invention, i.e., the criticality of the range of the dimension is not shown.

### *Conclusion*

7. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1700.

Tchea  
July 22, 2006

  
Thorl Chea  
Primary Examiner  
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